ACTUARIAL SECTION

Report of the Actuary on the Annual Valuation

for Fiscal Year ending June 30, 2007

Cavanaugh Macdonald
CONSULTING, LLC

December 3, 2007

Board of Trustees
Teachers' Retirement System of the State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Section 161.400 of the law governing the operation of the Teachers' Retirement System of the State of Kentucky provides that the actuary shall make an actuarial valuation of the System. We have submitted the results of the annual actuarial valuation prepared as of June 30, 2007. While not verifying the data at source, the actuary performed tests for consistency and reasonability. The valuation indicates that combined member and state contributions for the fiscal year ending June 30, 2010 at the rate of 25.07% of university members' salaries and 28.03% of non-university members' salaries are required to support the benefits of the System. This represents an increase since the previous valuation in the required employer contribution rate of 0.61% of payroll for the 2009/2010 fiscal year. There has been a net increase in the expected state special appropriation from 4.25% to 4.28%, or 0.03% of payroll.

Therefore, for the 2009/2010 fiscal year, in addition to the state statutory contribution rates and the state special appropriation, there is a required increase in the employer contribution rate of 2.46%; 0.58% from this valuation and 1.88% from the previous valuation. In order to maintain the actuarial soundness of the retirement system, the entire required contributions will need to be made without any being used as a Stabilization Contribution for the Medical Insurance Fund.

The valuation takes into account the effect of amendments to the System enacted through the 2007 Session of the Legislature.

The financing objective of the System is that contribution rates will remain relatively level over time as a percentage of payroll. The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the unit credit actuarial cost method with projected benefits. Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 4.0% annually. The assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System and meet the parameters for the disclosures under GASB 25 and 27.

We have prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Schedule A, Schedule B, Schedule C, Solvency Test and Analysis of Financial Experience shown in the Actuarial Section of the Annual Report.

The valuation reflects that a portion of the annual required contributions to the fund have been allocated to the Medical Insurance Fund and are being repaid over time. Therefore, there is a Net Pension Obligation (NPO) under GASB 27 for the fiscal year ending June 30, 2007.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

In our opinion the System is operating on an actuarially sound basis. Assuming that contributions to the System are made by the employer from year to year in the future at the rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the retirement fund to provide the benefits called for under the System may be safely anticipated.

Respectfully submitted,

Edward A. Macdonald, ASA, FCA, MAAA
President

Edward J. Koebel, EA, FCA, MAAA
Senior Actuary

3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144

Report of Actuary on the Valuation

Prepared as of June 30, 2007

Section I - Summary of Principal Results

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (all dollar amounts are $1,000's):

Valuation Date	**June 30, 2007**		**June 30, 2006**	
Number of active members	75,144		73,740	
Annual salaries	$ 2,975,289		$ 2,859,477	
Number of annuitants and beneficiaries	39,506		38,497	
Annual allowances	$ 1,135,635		$ 1,074,159	
Assets				
Market value	$ 15,421,092		$ 13,783,830	
Actuarial value	$ 15,284,955		$ 14,857,641	
Unfunded actuarial accrued liability	$ 5,970,019		$ 5,467,140	
Amortization period (years)	30		30	
	University	**Non-University**	**University**	**Non-University**
Pension Plan:				
Normal	13.82 %	17.34 %	13.91 %	17.22 %
Accrued liability	11.25	10.69	10.55	10.20
Total	25.07 %	28.03 %	24.46 %	27.42 %
Member	7.625 %	9.105 %	7.625 %	9.105 %
State (ARC)	17.445	18.925	16.835	18.315
Total	25.07 %	28.03 %	24.46 %	27.42 %
Life Insurance Fund:				
State	0.17 %	0.17 %	0.17 %	0.17 %
Medical Insurance Fund:				
Member	0.75 %	0.75 %	0.75 %	0.75 %
State Match	0.75	0.75	0.75	0.75
State Additional	0.00	0.00	0.00	0.00
Total	1.50 %	1.50 %	1.50 %	1.50 %
Total Contributions:	26.74 %	29.70 %	26.13 %	29.09 %
Contribution rates for fiscal year ending:	**June 30, 2010**		**June 30, 2009**	
Member Statutory	8.375 %	9.855 %	8.375 %	9.855 %
State Statutory	11.625	13.105	11.625	13.105
Required Increase	2.46	2.46	1.88	1.88
State Special	4.28	4.28	4.25	4.25
Total	26.74 %	29.70 %	26.13 %	29.09 %

2. The valuation indicates that combined member and State contributions at the rate of 25.07% of salaries for university members and at 28.03% for non-university members are sufficient to support the current benefits of the System. Comments on the valuation results as of June 30, 2007 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI.
3. Schedule D of this report outlines the full set of actuarial assumptions and methods employed in the current valuation.
4. The valuation takes into account the effect of amendments to the System enacted through the 2007 Session of the Legislature.
5. All amounts shown prior to the 2004/2005 fiscal year were developed and/or reported by the prior actuarial firm.

Section II - MEMBERSHIP DATA

1. Data regarding the membership of the System for use as a basis of the valuation were furnished by the Retirement System office. The following table shows the number of active members and their annual salaries as of June 30, 2007 on the basis of which the valuation was prepared.

Group	Number	Annual Salaries ($1,000)
Full Time	57,192	$ 2,856,193
Part Time	17,952	119,096
Total	75,144	$ 2,975,289

The table reflects the active membership for whom complete valuation data was submitted. The results of the valuation were adjusted to take account of inactive members and members for whom incomplete data was submitted.

2. The following table shows the number and annual retirement allowances payable to annuitants and beneficiaries on the roll of the Retirement System as of the valuation date.

The Number and Annual Retirement Allowances of Annuitants and Beneficiaries on the Roll as of June 30, 2007

Group	Number	Annual Retirement Allowances[1] ($1,000)
Service Retirements	34,530	$ 1,040,212
Disability Retirements	2,086	50,322
Beneficiaries of Deceased Members	2,890	45,101
Total	39,506	$ 1,135,635

[1] *Includes cost-of-living adjustments effective through July 1, 2007.*

3. Table 1 of Schedule F shows a distribution by age and years of service of the number and annual salaries of active members included in the valuation, while Table 2 shows the number and annual retirement allowances of annuitants and beneficiaries included in the valuation, distributed by age.

Section III - ASSETS

1. As of June 30, 2007 the market value of Pension Plan assets for valuation purposes held by the System amounted to $15,421,092,446. This value excludes assets in the Medical Insurance Fund, the 403(b) Program Reserve Fund, and the Life Insurance Fund, which are not included in the assets used for Pension Plan valuation purposes.
2. The five-year market related value of Pension Plan assets used for valuation purposes as of June 30, 2007 was $15,284,954,542. Schedule B shows the development of the actuarial value of assets as of June 30, 2007.
3. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Pension Plan and the Life Insurance Fund.

Section IV - COMMENTS ON VALUATION

1. Schedule A of this report outlines the results of the actuarial valuation. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D.

2. The valuation shows that the System has an actuarial accrued liability of $8,411,311,840 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of benefits payable to annuitants and beneficiaries amounts to $12,653,329,966 of which $1,095,890,755 is for special appropriations remaining to be made toward funding minimum annuities, ad hoc increases and sick leave allowances granted after 1981. The liability for benefits expected to be paid to inactive members and to members entitled to deferred vested benefits is $190,332,009. The total actuarial accrued liability of the System amounts to $21,254,973,815. Against these liabilities, the System has present assets for valuation purposes of $15,284,954,542. When this amount is deducted from the actuarial accrued liability of $21,254,973,815, there remains $5,970,019,273 as the unfunded actuarial accrued liability.

3. The normal contribution rate is equal to the actuarial present value of benefits accruing during the current year divided by the annual active members' payroll. The normal contribution rate is determined to be 13.82% of payroll for university members and 17.34% for non-university members.

Section V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

1. Section 161.540 of the retirement law provides that each university member will contribute 8.375% of annual salary to the System and each non-university member will contribute 9.855% of annual salary. Of this amount, 0.75% is paid to the Medical Insurance Fund for medical benefits leaving 7.625% for university members and 9.105% for non-university members applicable for the retirement benefits taken into account in the valuation.

2. Section 161.550 provides that the State will match the member contributions and contribute a supplemental 3.25% of members' salaries towards discharging the System's unfunded obligations. The System was amended as of June 30, 2000 to allow the Board to allocate up to a maximum of the entire 3.25% to the Medical Insurance Fund. **For the 2009/2010 fiscal year, we recommend that the Board allocate the entire 3.25% towards the Pension Plan.**

3. Therefore, 10.875% of active university members' salaries and 12.355% of active non-university members' salaries is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. Of this amount, 0.17% of payroll will be allocated to the Life Insurance Fund. Based on the results of the valuation, an additional 2.46% of payroll for both university and non-university will be required in order to maintain the amortization of the unfunded liability of the Pension Plan within a 30-year period. An additional special appropriation of 4.28% of total payroll will be made by the State. The total required employer contribution rate to the Pension Plan is, therefore, 17.445% for university members and 18.925% for non-university members. The total member and employer contribution rates to the Pension Plan are shown in the following table.

Contribution Rates by Source

Member	UNIVERSITY	NON-UNIVERSITY
Statutory Total	8.375%	9.855%
Statutory Medical Insurance Fund	(0.75)	(0.75)
Contribution to Pension Plan	7.625%	9.105%
Employer		
Statutory Matching Total	8.375%	9.855%
Statutory Medical Insurance Fund	(0.75)	(0.75)
Supplemental Funding	3.25	3.25
Subtotal	10.875%	12.355%
Life Insurance	(0.17) %	(0.17) %
Additional to Maintain 30-Year Amortization	2.46	2.46
Special Appropriation	4.28	4.28
Contribution to Pension Plan	17.445%	18.925%
Total Contribution to Pension Plan	25.07 %	28.03 %

4. The valuation indicates that normal contributions at the rate of 13.82% of active university members' salaries are required to meet the cost of benefits currently accruing. The normal rate for non-university members is 17.34%. The difference between the total contribution rate and the normal rate remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This accrued liability rate is 11.25% for university members and 10.69% for non-university members. These rates include special appropriations of 4.28% of payroll to be made by the State. These rates are shown in the following table.

ACTUARIALLY DETERMINED CONTRIBUTION RATES

	PERCENTAGE OF ACTIVE MEMBERS' SALARIES	
Rate	**University**	**Non-University**
Normal	13.82%	17.34 %
Accrued Liability*	11.25	10.69
Total	25.07%	28.03 %

* *Includes special appropriations of 4.28% of payroll to be made by the State.*

5. The unfunded actuarial accrued liability amounts to $5,970,019,273 as of the valuation date. Accrued liability contributions at the rate of 11.25% of active university members' payroll and 10.69% of non-university members' payroll are sufficient to amortize the unfunded actuarial accrued liability over a 30-year period, based on the assumption that the payroll will increase by 4.0% annually.

Section VI - COMMENTS ON LEVEL OF FUNDING

1. The benefit percentage for non-university members is 2.0% for service accrued through July 1, 1983 and 2.5% for service up to 30 years accrued after that date. However, for members who join the System on or after July 1, 2002 and retire with less than 10 years of service, the benefit percentage is 2.0%. For members who joined the System on or after July 1, 2002, who retire with 10 or more years of service, the benefit percentage is 2.5% for all years of service up to 30 years. For all members who retire on or after July 1, 2004, the benefit percentage for service earned in excess of 30 years is 3.0%. The total net contribution rate is 28.03% of payroll for non-university members. For university members the benefit percentage is 2.0% for all service and the contribution rate is 25.07%. Our calculations indicate that these contribution rates will be sufficient to cover the benefits of the System, the annual 1.5% increases in the allowances of retired members and beneficiaries, and the liabilities for minimum annuities, ad hoc increases and sick leave allowances granted after 1981.

2. The valuation indicates that the present statutory contribution rates, supplemental funding and special appropriations, if continued at the current level percentage, along with an additional required contribution of 2.46%, not currently provided in statute, are sufficient to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years. However, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within a period of 30 years.

3. Since the 2005 fiscal year, a portion of the contributions required for the pension fund have been allocated as loans to the Medical Insurance Fund for Stabilization Funding. Payments are being made to repay these loans, but the borrowing is expected to continue in the future. The following table shows the amounts borrowed, annual payments and remaining balances as of July 1, 2007:

Medical Insurance Fund - Stabilization Funding

	Loan Amount	Annual Payment	Balances as of July 1, 2007
2004/2005	$ 29,169,700	$ 4,249,600	$ 24,891,315
2005/2006	62,294,800	9,075,500	57,891,410
2006/2007	73,000,000	14,133,200*	73,000,000
TOTAL	$ 164,464,500	$ 27,458,300	$ 155,782,725

** Amount shown is the first year payment. The payments will be $10,158,232 annually beginning July 1, 2008.*

4. There are no excess assets or contributions available to provide additional benefits, and there is a cumulative increase in the required employer contribution of 2.46% of payroll for the fiscal year ending June 30, 2010, as shown in the following table:

Valuation Date	Fiscal Year	Increase	Cumulative Increase
June 30, 2004	June 30, 2007	0.11%	0.11%
June 30, 2005	June 30, 2008	1.21	1.32
June 30, 2006	June, 30, 2009	0.56	1.88
June 30, 2007	June 30, 2010	0.58	2.46

In addition, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within 30 years. Any further benefit improvements must be accompanied by the entire additional contributions necessary to support the benefits.

Section VII - ANALYSIS OF FINANCIAL EXPERIENCE

The following table shows the estimated gain or loss from various factors that resulted in an increase of $502,879,205 in the unfunded accrued liability from $5,467,140,068 to $5,970,019,273 during the year ending June 30, 2007.

(Dollar amounts in thousands) ITEM	Amount of Increase/(Decrease)
Interest (7.50%) added to previous unfunded accrued liability	$ 410,036
Expected accrued liability contribution	(242,414)
Contributions allocated to the Medical Insurance Fund (MIF) for Stabilization Funding during 2006/2007 fiscal year with interest	75,601
Repayment of prior year's MIF Stabilization Funding	(13,824)
Experience:	
Valuation asset growth	258,747
Pensioners' mortality	(8,309)
Turnover and retirements	(87,616)
New entrants	91,109
Salary increases	19,549
Amendments	0
Assumption and method changes	0
TOTAL	**$ 502,879**

Section VIII - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

Number of Active and Retired Members as of June 30, 2007

GROUP	NUMBER
Retirees and Beneficiaries currently receiving benefits	39,506
Terminated employees entitled to benefits but not yet receiving benefits	4,498
Active Plan Members	75,144
TOTAL	**119,148**

2. Another such item is the schedule of funding progress as shown below.

Schedule of Funding Progress
(Dollar amount in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Projected Unit Credit (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) /c)
06/30/02	$ 13,588,847	$ 15,695,574	$ 2,106,727	86.6 %	$ 2,313,663	91.1 %
06/30/03	13,863,786	16,594,781	2,730,995	83.5	2,497,731	109.3
06/30/04	14,255,131	17,617,626	3,362,495	80.9	2,641,533	127.3
06/30/05	14,598,843	19,134,870	4,536,027	76.3	2,703,430	167.8
06/30/06*	14,857,641	20,324,781	5,467,140	73.1	2,859,477	191.2
06/30/07	15,284,955	21,254,974	5,970,019	71.9	2,975,289	200.7

** Reflects change in decremental assumptions.*

All figures prior to 06/30/2005 were reported by prior actuarial firm.

3. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2007. Additional information as of the latest actuarial valuation follows.

Valuation Date 06/30/2007

Actuarial cost method .... Projected unit credit

Amortization method .... Level percent of pay, open

Remaining amortization period .... 30 years

Asset valuation method .... 5-year smoothed market

Actuarial Assumptions:

Investment Rate of Return*
7.50%

Projected Salary Increases*
4.00 - 8.20%

Cost-of-Living Adjustments
1.50% Annually

**Includes Inflation at 4.00%*

Schedule of Employer Contributions

Fiscal Year Ended June 30	Annual Required Contributions	Increase
2002	$ 284,794,710	100 %
2003	322,046,968	100
2004	364,351,412	100
2005	383,776,826	100
2006	406,107,266	100
2007	494,565,369	85

4. Following is the calculation of the annual pension cost and net pension obligation for the fiscal year ending June 30, 2007:

Annual Pension Cost and Net Obligation for Fiscal Year Ending June 30, 2007

(a) Employer annual required contribution	$	494,565,369
(b) Interest on net pension obligation		0
(c) Adjustment to annual required contribution		18,021,094
(d) Annual pension cost: (a) + (b) - (c)		476,544,275
(e) Employer contributions made for fiscal year ending July 30, 2007		421,565,369
(f) Increase (decrease) in net pension obligation: (d) - (e)		54,978,906
(g) Net pension obligation beginning of fiscal year		0
(h) Adjustment to reflect prior shortfall in contributions*		94,431,495
(i) Net pension obligation end of fiscal year: (f) + (g) + (h)	$	149,410,401

* Formerly treated as short-term differences

TREND INFORMATION

Year Ending	Annual Pension Cost (APC)	Percentage of APC Contributed	Net Pension Obligation (NPO)
June 30, 2005	$ 383,776,826	100 %	$ 0
June 30, 2006	406,107,266	100	0
June 30, 2007	476,544,275	88	149,410,401

SCHEDULE A
Results of the Valuation
Prepared as of June 30, 2007
($1,000's)

1. ACTUARIAL ACCRUED LIABILITY

Present value of prospective benefits payable in respect of:

(a) Present active members:		
• Service retirement benefits	$ 7,849,642	
• Disability retirement benefits	352,261	
• Death and survivor benefits	67,540	
• Refunds of member contributions	141,869	
Total		$ 8,411,312
(b) Present inactive members and members entitled to deferred vested benefits:		190,332
(c) Present annuitants and beneficiaries:		
• Service retirement benefits	$ 11,837,408	
• Disability retirement benefits	402,125	
• Death and survivor benefits	413,797	
Total		$ 12,653,330
(d) Total actuarial accrued liability		$ 21,254,974

2. PRESENT ASSETS FOR VALUATION PURPOSES	$ 15,284,955
3. Unfunded Actuarial Accrued Liability [(1) MINUS (2)]	$ 5,970,019

4. NORMAL CONTRIBUTION RATE	UNIVERSITY	NON-UNIVERSITY
(a) Actuarial present value of benefits accruing annually	$ 25,486	$ 483,858
(b) Annual payroll of active members	$ 184,399	$ 2,790,890
(c) Normal contribution rate [4(a) divided by 4(b)]	13.82%	17.34%

Solvency Test
(in millions of dollars)

Fiscal Year	(1) Active Member Contributions	(2) Retirants and Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets
6/30/2002	$ 2,302.3	$ 8,816.9	$ 4,576.4	$ 13,588.8
6/30/2003	2,413.9	9,329.3	4,851.6	13,863.8
6/30/2004	2,546.1	9,906.2	5,165.3	14,255.1
6/30/2005	2,621.3	11,370.4	5,143.2	14,598.8
6/30/2006	2,615.8	12,216.6	5,492.4	14,857.6
6/30/2007	2,762.8	12,843.7	5,648.5	15,285.0

	Fiscal Year	(1)	(2)	(3)
Portion of	6/30/2002	100 %	100 %	54 %
Accrued	6/30/2003	100	100	44
Liabilities	6/30/2004	100	100	35
Covered	6/30/2005	100	100	12
by	6/30/2006	100	100	0
Assets	6/30/2007	100	97	0

SCHEDULE B
Development of Actuarial Value of Assets as of June 30, 2007

(1)	Actuarial Value Beginning of Year		$ 14,857,641,238
(2)	Market Value End of Year		$ 15,421,092,446
(3)	Market Value Beginning of Year		$ 13,783,830,173
(4)	Cash Flow		
	a.	Contributions	$ 704,578,332
	b.	Benefit Payments	1,117,361,706
	c.	Net	$ (412,783,374)
(5)	Investment Income		
	a.	Market total: (2) - (3) - (4)c	$ 2,050,045,647
	b.	Assumed Rate	7.50%
	c.	Amount for Immediate Recognition [(1) x (5)b] + [(4)c x (5)bx 0.5]	$ 1,098,843,716
	d.	Amount for Phased-In Recognition (5)a - (5)c	$ 951,201,931
(6)	Phased-In Recognition of Investment Income		
	a.	Current Year: 0.20 x (5)d	$ 190,240,386
	b.	First Prior Year	(75,996,339)
	c.	Second Prior Year	(23,843,540)
	d.	Third Prior Year	(349,147,545)
	e.	Fourth Prior Year	0
	f.	Total Recognized Investment Gain	$ $(258,747,038)
(7)	Actuarial Value End of Year: (1) + (4)c + (5)c + (6)f		$ 15,284,954,542
(8)	Difference Between Market & Actuarial Values (2) - (7)		$ 136,137,904

SCHEDULE C
PENSION PLAN ASSETS
Summary of Receipts & Disbursements*
(Market Value)

	For the Year Ending June 30, 2007	For the Year Ending June 30, 2006
RECEIPTS FOR THE YEAR		
Contributions		
Members	$ 269,687,864	$ 258,464,856
Employers	434,890,468	406,107,266
Total	$ 704,578,332	$ 664,572,122
Net Investment Income	2,057,397,493	707,778,812
TOTAL	$ 2,761,975,825	$ 1,372,350,934
DISBURSEMENTS FOR THE YEAR		
Benefits Payments	$ 1,102,538,879	$ 1,024,872,421
Refunds to Members	14,822,827	12,834,222
Medical Insurance Payments	0	0
Miscellaneous, including expenses	7,351,846	6,839,859
TOTAL	$ 1,124,713,552	$ 1,044,546,502
EXCESS OF RECEIPTS OVER DISBURSEMENTS	$ 1,637,262,273	$ 327,804,432
RECONCILIATION OF ASSET BALANCES		
Asset Balance as of the Beginning of the Year	$ 13,783,830,173	$ 13,456,025,741
Excess of Receipts over Disbursements	1,637,262,273	327,804,432
Asset Balance as of End of the Year	$ 15,421,092,446	$ 13,783,830,173

** Excludes assets for Medical Insurance Fund, the 403(b) Program Reserve Fund and the Life Insurance Fund.*

SCHEDULE C
LIFE INSURANCE FUND*
Summary of Receipts & Disbursements
(Market Value)

	For the Year Ending	
RECEIPTS FOR THE YEAR	June 30, 2007	June 30, 2006
Contributions		
Members	$ 0	$ 0
Employers	5,022,137	4,813,703
Total	$ 5,022,137	$ 4,813,703
Net Investment Income	3,067,738	2,689,330
TOTAL	$ 8,089,875	$ 7,503,033
DISBURSEMENTS FOR THE YEAR		
Benefits Payments	$ 4,245,000	$ 3,894,000
Refunds to Members	0	0
Medical Insurance Payments	0	0
Miscellaneous, including expenses	0	0
TOTAL	$ 4,245,000	$ 3,894,000
EXCESS OF RECEIPTS OVER DISBURSEMENTS	$ 3,844,875	$ 3,609,033
RECONCILIATION OF ASSET BALANCES		
Asset Balance as of the Beginning of the Year	$ 67,581,237	$ 63,972,204
Excess of Receipts over Disbursements	3,844,875	3,609,033
Asset Balance as of End of the Year	$ 71,426,112	$ 67,581,237

* *The retiree portion of the Life Insurance Fund when allocated will be moved to the GASB 43 and 45 report next year.*

SCHEDULE D

Outline of Actuarial Assumptions and Methods

The assumptions and methods used in the valuation were selected by the Actuary based on the actuarial experience investigation as of June 30, 2005 and adopted by the Board of Trustees on September 18, 2006.

INVESTMENT RATE OF RETURN: 7.5% per annum, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 4.0% per annum:

Age	20	25	30	35	40	45	50	55	60	65
Annual Rate	8.10%	7.20%	6.20%	5.50%	5.00%	4.70%	4.50%	4.30%	4.20%	4.00%

Separations From Service: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

MALES: Annual Rate of . . .

AGE	DEATH	DISABILITY	WITHDRAWAL 0 - 4	WITHDRAWAL 5 - 9	WITHDRAWAL 10+	RETIREMENT Before 27 Years of Service	RETIREMENT After 27 Years of Service*
20	0.003 %	0.01%	9.00%				
25	0.010	0.01	9.00	1.50%			
30	0.016	0.02	9.00	3.00	3.00%		
35	0.032	0.05	10.00	3.25	1.50		
40	0.048	0.08	10.00	3.75	1.50		
45	0.064	0.22	9.50	2.50	1.50		25.0%
50	0.104	0.42	10.00	4.00	3.00		20.0
55	0.216	0.60	11.00	3.00	2.70	6.0%	35.0
60	0.375	0.79	11.00	3.00	2.70	14.0	25.0
62	0.438	0.83	11.00	3.00	2.70	14.0	23.0
65	0.566	0.90	11.00	3.00	2.70	22.5	35.0
70	0.905	0.00	0.00	0.00	0.00	100.0	100.0

** Plus 5% before age 55 and 15% after age 55 in year when first eligible for unreduced retirement with 27 years of service.*

FEMALES: Annual Rate of . . .

AGE	DEATH	DISABILITY	WITHDRAWAL 0 - 4	WITHDRAWAL 5 - 9	WITHDRAWAL 10+	RETIREMENT Before 27 Years of Service	RETIREMENT After 27 Years of Service*
20	0.002 %	0.03 %	6.00%				
25	0.007	0.03	8.50	3.00%			
30	0.014	0.04	9.00	4.00	1.50%		
35	0.026	0.11	8.50	4.00	2.00		
40	0.044	0.22	8.50	2.50	1.50		
45	0.055	0.38	7.00	2.50	1.50		25.0%
50	0.066	0.44	8.50	3.00	2.25		20.0
55	0.085	0.56	10.00	3.50	2.50	7.5%	35.0
60	0.122	0.85	11.00	3.50	2.50	16.5	30.0
62	0.137	0.85	11.00	3.50	2.50	12.5	25.0
65	0.159	0.85	11.00	3.50	2.50	26.0	30.0
70	0.195	0.00	0.00	0.00	0.00	100.0	100.0

** Plus 5% before age 55 and 20% after age 55 in year when first eligible for unreduced retirement with 27 years of service.*

Deaths After Retirement: According to the 1994 Group Annuity Mortality Table for the period after service retirement. Special rates are used for the period after disability retirement. Representative values of the assumed annual rates of death after service and disability retirement are as follows:

Annual Rate of Death After . . .

	Service Retirement		Disability Retirement	
Age	MALE	FEMALE	MALE	FEMALE
45	0.1578 %	0.0973 %	6.500%	6.500%
50	0.2579	0.1428	10.000	10.000
55	0.4425	0.2294	10.000	10.000
60	0.7976	0.4439	9.000	9.000
65	1.4535	0.8636	10.000	10.000
70	2.3730	1.3730	6.500	4.500
75	3.7211	2.2686	7.000	6.000
80	6.2027	3.9396	10.000	6.500
85	9.7240	6.7738	12.500	7.500
90	15.2931	11.6265	15.000	17.500
95	23.3606	18.6213	23.368	31.702

Actuarial Method: Unit Credit Actuarial Cost Method with projected benefits. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability.

Assets: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the assumed valuation rate of return of 7.50%. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

Expense Load: None.
Percent Married: 100%, with females 3 years younger than males.
Loads: Unused Sick Leave: 1% of active liability

SCHEDULE E

Summary of Main System Provisions As Interpreted for Valuation Purposes

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2007. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1. DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, "final average salary" means the average of the three highest annual salaries.

2. BENEFITS

Service Retirement Allowance

Condition for Allowance: Completion of 27 years of service or attainment of age 55 and 5 years of service.

Amount of Allowance: The annual retirement allowance for non-university members is equal to:

(a) 2.0% of final average salary multiplied by service before July 1, 1983, plus
(b) 2.5% of final average salary multiplied by service after July 1, 1983.
(c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.
(d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by actuarial equivalent factors from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Disability Retirement Allowance

Condition for Allowance: Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.

Amount of Allowance: The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.

Benefits Payable on Separation from Service

Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60.

Life Insurance

A separate Life Insurance fund has been created as of June 30, 2000 to pay benefits on behalf of deceased KTRS active and retired members.

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	Annual Allowance
1	$ 2,400
2	4,080
3	4,800
4 or more	5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.

If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options:

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2. A single life annuity payable during the member's lifetime with payments for 10 years certain.

Option 3. At the death of the member his allowance is continued throughout the life of his beneficiary.

Option 3(a). At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.

Option 4. At the death of the member one half of his allowance is continued throughout the life of his beneficiary.

Option 4(a). At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Post-Retirement Adjustments

The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3. CONTRIBUTIONS

Member Contributions

University members contribute 8.375% of salary of which 7.625% is contributed to the Retirement System and 0.75% is contributed to the Medical Insurance Fund. Non-university members contribute 9.855% of salary of which 9.105% is contributed to the Retirement System and 0.75% is contributed to the Medical Insurance Fund. Member contributions are picked up by the employer.

Schedule of Retirants, Beneficiaries and Survivors Added to and Removed from Rolls

	Add to Rolls		Remove from Rolls		Rolls End-of-Year	
Fiscal Year	Number	Annual Allowances (Millions)	Number	Annual Allowances (Millions)	Number	Annual Allowances (Millions)
1998	2,500	$ 66.7	1,040	$13.4	27,744	$ 494.1
1999	2,415	73.9	998	13.9	29,161	554.0
2000	2,462	79.2	1,008	14.1	30,615	619.2
2001	2,410	77.0	1,128	16.5	31,897	679.8
2002	2,577	86.2	1,063	16.8	33,408	749.2
2003	2,252	86.7	1,015	16.9	34,645	819.0
2004	2,126	85.4	1,033	17.5	35,738	887.0
2005	2,644	105.1	1,036	18.9	37,346	973.1
2006	2,266	121.1	1,115	20.0	38,497	1,074.2
2007	2,050	82.1	1,041	20.7	39,506	1,135.6

Fiscal Year	% Increase in Annual Allowances	Average Annual Allowances
1998	12.1%	$ 17,809
1999	12.1	19,000
2000	11.8	20,226
2001	9.8	21,311
2002	10.2	22,425
2003	9.3	23,641
2004	8.3	24,819
2005	9.7	26,058
2006	10.4	27,902
2007	5.7	28,746

Schedule of Active Member Valuation Data

	Fiscal Year	(1) Number of Active Members	(2) Total Annual Payroll	(3) Average Annual Pay	(4) % Increase (Decrease) in Average Pay
F	2002	54,175	$ 2,313,663,000	42,707	3.3
F	2003	54,048	2,394,436,000	44,302	3.7
P		17,049	103,295,000	6,059	N/A
F	2004	54,869	2,541,238,000	46,315	4.5
P		17,081	100,295,000	5,872	-3.1
F	2005	55,003	2,597,795,000	47,230	2.0
P		17,278	105,665,000	6,115	4.2
F	2006	56,115	2,745,474,000	48,926	3.6
P		17,625	114,003,000	6,468	5.8
F	2007	57,217	2,856,193,000	49,919	2.0
P		17,927	119,096,000	6,643	2.7

** Effective July 1, 2002, substitute and part-time teachers joined the field of membership.*

F: Full-time P: Part-time